

**Case Report**

Evaluation of Stress, Loneliness and Depression Among Residential and Non-Residential Students of Dhaka University: Case-Control Study

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Abstract: The purpose of the present study was to investigate the stress, loneliness and depression among residential and non-residential students of Dhaka University. The respondents were drawn from different halls and locations. A total of 80 participants were used as subjects in the present study. A Bangla version of three scales (Stress scale-Cohen, 1999, Loneliness scale-Russell, Dan, 1978 and Depression scale-Rahman and Uddin, 2005) was administered in this study. Analyzing t-test the findings ($p < .001$) revealed that the mean scores between residential and non-residential students of Dhaka University were significant.

Keywords: Stress, Loneliness, Depression, Residential, Non-Residential

1. Introduction

Social relationship may reflect by the bonding and behaviors of one's with others which considered as a prominent characteristic of good personality. In most cases, one's progress of growing depends on better relationship. From various bonding concepts it can be said that, overall process of progress is a continuous way which start from childhood. By ensuring such a process self-independence, confidence and flexibility with ups and down will be achieved [1]. In contrary, various psychological complications such as stress, loneliness, depression may arise from improper involvement [2].

Stress is a term associated with the organism. We generally use the word "stress" when we feel that everything seems to have become too much. Anything that poses a challenge or a threat to our well-being is a stress [3]. The conceptualization of stress seen as a necessary reported by Selye is basically a

physiological one, in which the stress response is adjunct to the organism's fight for survival. By causing various body changes, the stress response prepares the individual for any exigency, giving him/her extra resources to fight that emergency or to take flight from it [4]. At the same time, the term 'stress' implies strain, which can be caused by prolonged exposure to the stressor. Coronary heart disease, psychosomatic symptoms, and premature aging may be some of the repercussions. Huang and colleagues have found that stress leads to long-term depression [5].

Depression is a type of mental disorder that affects a person's mood. It can affect thoughts, feelings, behavior, and overall health. Normal feelings fall along a continuum from mild to intense, and the same is true of depression [6]. It is normal to respond to losses in one's life with sadness and gloom. But when these feelings block a person from performing their everyday activities or are out of line with the reality of a person's life, they are considered symptoms of a

‘depressive disorder’ [7].

Emotions refer to the feeling aspect of behavior such as mild irritation, rage, despair, sadness, love, and liking. However the physiological effects of stress can be clearly pinpointed, observed, and measured [8]. Emotional changes are highly subjective. One can experience them, but one cannot express them in words. Often a person may see things with anger within, but maintain a cool exterior, clearly indicating that emotions are not always observable [9]. In general, emotions are internal states, which are often short-lived and can be experienced in combination (one can feel anger, fear, and pleasure at the same time). Three identifiable emotional constellations that are fairly regular outcomes of stress are anxiety, anger, and depression [10].

Parsons investigated the impact of group counseling and stress management on reported depression, anxiety, attitude toward divorce, school functioning, and behavior in children aged 8 to 11 years. Females in the divorce support group (DSG) and males in the stress management group (SMG) reported significant positive changes in school functioning compared to others [11]. Latha and colleagues carried out a study in which a group of 78 individuals aged 11–65 years who had attempted suicide, 58 depressive individuals aged 16 to 51 years, and 60 normal individuals (control) aged 18 to 53 years were asked to fill in a measure of stressful life events [12]. Findings suggested that, compared to the depressive and control individuals, suicidal individuals reported more stressful life events, which included marital discord conflict with in-laws or family, problems in love, illness, death in the family, and unemployment. Mohr reported on stress and its effects on mental health at workplace. The conclusion of Mohr’s study indicated positive health effects could be achieved as a result of reducing stress level [13].

Another psychological disorder- loneliness is closely related to stress and depression. Researchers have asserted that loneliness is a more prevalent and serious problem among all the age groups [14]. Loneliness can be described as a gnawing chronic disease without redeeming features which has long been recognized as a strong correlate of depressive symptoms [15]. The construct loneliness has been identified as a risk factor for depressive symptoms in both cross-sectional [16] and longitudinal [17] studies. Prior work revealed that the levels of loneliness and depressive symptoms may vary across the life span.

Despite variations across the life span, the association between loneliness and depressive symptoms appears to be stable (moderately and equivalently positive) across age [18] and ethnicity [19]. It noted that this finding suggests that concerns over close relationships are related to depressive symptoms at any point. In the view of [15], loneliness and depressive symptoms are intimately related but distinct constructs. In previous work, loneliness was defined as the experience of solitude, disconnection, and lack of closeness, which is often assessed with the revised UCLA Loneliness Scale [20] and usually conceptualized as a one dimensional construct; this view has considerable support [21]. Loneliness is an unique risk factor for depressive symptom [15].

The accessible literatures also provide some support for this view. For instance, reported significant association between loneliness and depressive symptoms among 217 older men in New Zealand after controlling for variables such as age, education, income, and social support [22]. A study also found a significant association between loneliness and depressive symptoms among undergraduates and patients with major depressive disorder after controlling for social support, social conflict, and sense of belonging [23].

The relationship between stressful life events and depression has equally been reasonably well established in both clinical and non clinical studies on depression [24]. The term stress exposure refers to the exposure to various health related outcomes such as depression. The term implies that exposure to negative or stressful life event precedes and increases the risk for depression [25].

Stress, loneliness and depression are common problems in all over the world. The findings of this study will be helpful to identify in some special cases. There are many associated features close related with these three mental disorders. Depressive mode, changes in appetite, difficulty sleeping, reduced sense of pleasure in formerly enjoyable activities, feeling of fatigue or loss of energy, sense of worthlessness, excessive or misplaced guilt difficulties in concentrating, thinking clearly or making decisions, attempts of suicide and even psychotic behaviors are close related with stress, loneliness and depression. This study may act as a guideline for taking further initiatives and different action plans. Some students are committed to suicide. If the University authority knows the exact reasons, it will be helpful for them to take proper initiatives. The present study will help to solve these types of problems. Hence, the objective of our study was to see whether there is any difference in stress, loneliness and depression among residential and non-residential students of Dhaka University.

2. Method

2.1. Participants

The sample of the present study consisted of 80 adult male students. Among them 40 were residential and 40 were non-residential of Dhaka University. The residential students were taken from three different halls- Shahidullah, F. H. and Ekushey respectively. The other non-residential students were from different places of Dhaka city-Rampura, Mohammadpur and Mirpur. The samples were selected from different session and different subjects studying in Dhaka University.

Table1. Sample size of this study.

Type	No. Sample
Residential	40
Non-residential	40

2.2. Measuring Instruments

a) Autobiographical Data

Before collecting the data from the participants they were

requested to mention their Name, Sex, Age, Session and Subject.

b) Stress Scale

The original version of the 'How stressful is your life scale?' [26] as translated into Bangla by Fahim [27] was used to measure life stress. The scale consisted of 10 items. Each item had 5 response categories: 'never', 'almost never', 'sometimes', 'fairly often', and 'very often'. The responders were scored 0, 1, 2, 3 and 4 respectively and negative items were scored reversibly. The total score was determined by summing the response scores off all times. Higher score in this scale indicates greater stress.

The co-relation co-efficient of the Bangla version with the English version was found to be 0.92 which was significant at 0.01 levels. The test-retest reliability over a period of 2 weeks was .85 (significant at 0.01 levels).

c) Loneliness Scale

Bangla version [28] is the Revised UCLA Loneliness Scale [29]. The revised UCLA loneliness scale was originally developed to measure loneliness. It is a 20 items like type scale. 20 items of English version were translated into Bengali. The English and Bangla version were administered to 50 subjects with a gap of 7 days. Significant correlation ($r = .88$, $p < .01$) between scores of English and Bangla version indicated translation reliability of the scale that were measured the same thing by the two version. Each of the 20 items is scored such that 1 indicates lack of loneliness and a 4 indicates high level of loneliness. Thus, total scale scores can range from 20 to 80. High score means high level of loneliness and lower score means low feeling of loneliness.

d) Depression Scale

Depression scale was undertaken to develop a new scale of depression in the cultural context of Bangladesh [30]. The DS scale is a 30 items like type scale. Each item has 5 response alternatives. The response options were 'not at all applicable' (1), 'not applicable' (2), 'uncertain' (3), 'a bit applicable' (4), and 'totally applicable' (5). All items were scored in positive direction. Higher scores indicate higher level of depression. Highest score in this scale is 150 and lowest is 30.

2.3. Procedure

Standard data collection procedure was followed to collect the data from the participants. Three scales were administered to the sample of the residential and non-residential students studying in Dhaka University. They were from different halls and local areas. The scale was administered to them individually.

At the beginning of the administration of the scale the subjects were informed that we are going to measure the stress, loneliness and depression. The purpose of this study is to motivate them to answer the questions sincerely and honestly. They were also assured that their respond should be kept secret. Before starting to answer the questions respondents were requested to make a silent reading of the whole questions. At the time of answering the questions there was no time limitation for the respondents to answer all the items of the scale. The participants were requested to record their name,

sex, age, session and subjects at the top of the scale. After completing the task questionnaires were collected from them and they were thanked for their sincere co-operation.

3. Results

In order to find out whether stress, loneliness and depression differ between residential and non-residential students of Dhaka University, obtained scores were analyzed by t-test. The results are in the following table.

Table 2. Difference between residential non-residential students according to stress.

Groups	M	SD	t	p-value
Residential	25.13	4.762	9.645	.000
Non-residential	15.65	3.991		.000

Table 3. Difference between residential non-residential students according to loneliness.

Groups	M	SD	t	p-value
Residential	55.83	6.025	7.102	.000
Non-residential	46.10	6.222		.000

Table 4. Difference between residential non-residential students according to depression.

Groups	M	SD	t	p-value
Residential	87.53	12.706	14.200	.000
Non-residential	53.33	8.401		.000

It appears from table-1 that the mean score and SD of residential students are 25.13, 4.762 whilst 15.65, and 3.991 for the non-residential students. The result indicates that there is a significant difference on stress between residential and non-residential students of Dhaka University.

Table-2 shows that the mean score and SD of residential students are 55.83, 6.025 whilst 46.10, and 6.222 for the non-residential students. The result indicates that there is a significant difference on loneliness between residential students and non-residential students of Dhaka University.

From the table-3 it is clear that the mean score and SD of residential students are 87.53, 12.706 whilst 53.33, and 8.401 for the non-residential students. The result indicates that there is a significant difference on depression between residential and non-residential students of Dhaka University.

4. Discussion

Every human being needs social bonding which is very crucial for physical and mental health. It not only improves a person's personality but also secure themselves from various psychological afflictions like isolation, stress, loneliness, depression etc [31]. These are related to one another and very common in one's life in different stage of life but long-term presence of these conditions may bring negative impacts on regular life [32, 33]. Social isolation is the consequence of loneliness where people feel forsaken due to deficient attachment with people [34]. Apathy, agitation, gloominess and frustration with social relationship are the common

incidence among lonely students than non lonely students. Loneliness makes a person depressed, however with the change of ages the frequency of loneliness may vary but relation with the depression may stay lifelong [35, 36]. A lonely person does not have any good friend because they are reserve, have low self-respect. In most cases loneliness is the contributing factor for suicidal attempt. Due to their poor connection with people they always suffer estrangement which ultimate results are depression [37, 38].

An emotional conditions in which person feel anxiety, loss of spirit from any kind of work, remain unhappy, always carry a feelings of guiltiness is called depression [39]. Causes of depression may vary depends on ages. Most common cause of younger depression is genetic, personality difficulty and life experience factors etc. Adolescence depression is more harmful than any other age [40]. They create their environment in such a way that depression may be perceived in their afterlife. On the other hand, health related problems are the responsible factor for depression in older age. Not only loneliness but also stress is another responsible factor for depression [41].

When a person psychologically disturb which affects mentally and physically is called stress [42]. When body has to perform against its usual capability than this condition may arise which provides a negative impact on family, community, organization [43]. We can divide stress into three types that is 'Anticipatory', 'Current' and 'Residual' stress. Anticipatory is a constructive stress in which body is previously prepared for any types of changes, stress, anxiety, and disaster, emergency. If it occurs moderately than this type of stress is very beneficial as it improve positive attitude, sharpness, and inspiration for any kind of work. On the other hand negative impact may happen if person pay more attention on future than present. Current stress usually depends on situation such as tension during debate or final 100 meters of a race. It is effective if it occur in constructive way. After the end of situation usually residual stress arises. Whether good or bad produce the same effects [44].

Stress, loneliness and depression are very harmful for mental and physical health and now a day's these types of problem arise in alarming rate than any other time especially among students. The present investigation shows that stress, loneliness and depression varied between residential and non-residential students of Dhaka University. As a sample, 80 students were drawn from three different halls as well as different locations of Dhaka City. Three residential halls were - Shahidullah, F. H. and Ekushey. Non-residential students were from Rampura, Mohammadpur and Mirpur. To collect data three different scales were used. T-test was used to analyze the result. The calculation shows that the mean scores were significant between residential and non-residential students of Dhaka University. The mean scores of the residential students were 25.13, 55.83 and 87.53 while 15.65, 46.10 and 53.33 were for the non-residential students. So, from the result it can be said that there is a significant difference between residential and non-residential students of Dhaka University. Residential students feel more stress,

loneliness and depressed than the non-residential counterparts.

Generally, there are variety types of factors influence on stress, loneliness and depression. The students living halls cannot share emotions, feelings with parents and relations properly. On the other hand, non-residential students can express themselves as their will. As a result, interpersonal relation cannot grow among the residential students. Economic problems are one of the most important factors for the residential students. As a consequence, 90-95 % students do tuition in their academic life which turns them into stress, loneliness and depression. Political instability is the major drawback for the residential students. They must do politics to save their residential seats or to have a seat in the University dormitory. However, non-residential students are free from these types of problems. Balanced diet is crying need to keep fit healthy which is not available in the University halls.

Comparing between residential and non-residential students it is seen that residential students are free from parental guidance. Family members do not interfere in their activities. As a matter of fact, some students forget their aim or dream and engage themselves many illegal activities which seduce their lives and they cannot complete academic studies even.

5. Conclusion

These present studies clearly indicate that residential students feel more stress, loneliness and depression than non-residential students. That's why they deserves more attention, more support from university authority, so that they can continue their study smoothly than their present condition.

Limitations and Recommendation

The measurement tools used in this study were translated format. So, the authenticity of the measures obtained had limitations. As the sample size was not large enough, inferential statistical analysis could not be done-as a result meaningful comparison of variables could not be obtained. Apart from these, the present study included only male participants which undermine the study for further outcomes. Hence, gender discrimination should be avoided as a whole.

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